

L0316003220 -- Cook Co.
David Chemical Co. /aka: Dayton Tire & Rubber
ILD0000382119
HRS/SF

CERCLA Abbreviated Preliminary Assessment

EPA Region 5 Records Ctr.



305293



**Illinois Environmental
Protection Agency**

Bureau of Land
Federal Sites Remediation Section
Site Assessment Unit

**ABBREVIATED
PRELIMINARY ASSESSMENT**

for:

**DAVID CHEMICAL COMPANY
ILD 0000382119
CHICAGO, ILLINOIS**

**PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
DIVISION OF REMEDIATION MANAGEMENT
FEDERAL SITE REMEDIATION SECTION
OFFICE OF SITE EVALUATION**

JANUARY 2002

SITE SUMMARY AND RECOMMENDATION

SITE DESCRIPTION AND HISTORY

On September 26, 2001, Illinois EPA's Office of Site Evaluation Program was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a Preliminary Assessment of the David Chemical Company site located in Chicago, Cook County, Illinois.

On August 1, 1997 the David Chemical Company site was placed onto the Comprehensive Environmental Response, Compensation, and Liability Information System (CERLCIS) in response to potential hazardous substance (liquid and solid chemical wastes) contamination at the chemical manufacturing operation located at 4650 W. 5th Avenue in the City of Chicago and the potential for these hazardous substances to migrate off-site. The City of Chicago Department of Environment (CDE), the City of Chicago Fire Department (CFD), the Metropolitan Waste Reclamation District (MWRD) and the Illinois Environmental Protection Agency (IEPA) have, at various times, responded to numerous release incidents at the facility. These incidents occurred between April and August 1993. The city was concerned that rainwater entering the building through a severely deteriorated roof would lead to off-site migration of hazardous substances. Initial sample information indicated that levels of solid and liquid chromium, lead, acid, caustics, and flammable compounds were sufficient enough within the building to warrant a removal action by U.S. EPA Region 5's Emergency Response Section. In September 1993 the IEPA initiated state criminal charges against the site owner for the improper storage and handling of RCRA listed wastes. In April 1994 the IEPA referred the site to the U.S. EPA for further assistance. A removal action was conducted from October 1994 to October 1995 to eliminate the threat to human health and the environment posed by the hazardous nature of the contaminants and the potential for deteriorating drums, small containers and bags containing said substances to fail.

The David Chemical Company site consisted of a small one story cinder block building located in a low income-high minority neighborhood of mixed light industrial companies, small businesses, and residential dwellings on the west side of Chicago. Bordering the property to the north is a utility easement beyond which is G.F. Structure Company, south by 5th Avenue across which is a railroad yard, east by Joe's Drums Company, and west by Kilpatrick Avenue across which is a metal machining company. Residential structures are located approximately one block northwest of the site on Arthington Street. Sumner Elementary School is located three blocks northeast of the site.

David Chemical Company began operations at this location in 1987, continuing until September 1993. Site operations consisted of manufacturing of cleaning agents and detergents for sale and distribution to metal plating facilities, automatic car washes and portable toilet companies. David Chemical utilized sodium bisulfate, proprietary chromic acid, chlorinated compounds, and industrial dyes and perfumes in the manufacturing of cleaning agents. Phosphates, bleach, and sodium nitrate were used in the manufacturing

of detergents. Fluoroboric acid was used to adjust the pH of the products. The company also recycled spent chrome plating solution by adding nitric and sulfuric acid to it to raise the chrome level for use as iridescent chromate in the cadmium plating process. The proprietary chromic acid was obtained from Precision Chrome, Inc., an electroplating facility located in Fox Grove, Illinois. From April 1993 to May 1994 the company had been under investigation or had some type of response by one or more of the organizations indicated in the second paragraph. Actions by these organizations varied from responses to releases of unknown liquid from the site, to executing a search warrant for the purpose of conducting an inspection for possible RCRA violations and collection of environmental and waste samples.

Within the deteriorating building were approximately seven hundred abandoned drums and small containers. Label information indicated the presence of corrosive, caustic, flammable, and toxic liquid and solid material. Drums were both, steel and fiber. Small containers were constructed of metal, plastic or paper. All drums and containers were found to be in poor condition, each in various stages of deterioration with some stacked on pallets two and three rows high. Many drums and containers were found to be in an open state or had deteriorated to the point of releasing material to the floor. On various occasions environmental authorities responded to reports of releases of unknown liquid migrating from the site. Orange and/or green liquid was observed migrating to the sidewalk and street curb along 5th Avenue. Trespassing was also noted to have occurred and the building had been vandalized, thereby allowing direct contact to the hazardous substances within the structure.

Due to the hazardous characteristics of the abandoned wastes a substantial threat to public health, welfare and the environment existed at the site. On October 18, 1994, U.S. EPA and support personnel mobilized at the site in order to secure it and begin a time critical removal. The removal was completed on October 10, 1995. During that time frame the collection of additional data, and removal of contaminated materials from within the building was completed. Subsequent demolition of the building itself was completed during the last week of site activity. All that remains is the concrete foundation. The following information summarizes remedial activities:

- Completion of identification and segregation of drums and small containers (including bagged material).
- Characterization of samples collected from drums and small containers (including bagged material).
- Hazardous and non-hazardous debris removed and disposed off-site.
- Solid and liquid hazardous material removed and disposed off-site.
- Drummed wastes removed and disposed off-site.
- Floors and walls of building were cleaned, wastewater collected, removed and disposed off-site.
- Building demolished by the City of Chicago, debris removed and disposed off-site. Concrete floor slab remains.

U. S. EPA had planned to collect soil samples from beneath the remaining concrete floor slab to determine if soil contamination existed, however, upon evaluation the floor was found to be in relatively good condition and acts as a cover for any potentially contaminated soil. U. S. EPA feels that an immediate threat does not exist.

CURRENT SITE CONDITIONS/ACTIVITIES

The risk to the surrounding environments appears to be minimal due to the fact that the area of concern was confined within the building. Throughout the removal process, chain link fence and 24-hour security guards restricted access to the property. Air monitoring was conducted in order to minimize exposure to the surrounding area. The removal action eliminated the source of plating solutions and other liquid and solid waste contamination from the site. Since the contamination source has been eliminated, it is also unlikely that this site has adversely impacted the soil exposure route or groundwater and surface water pathways.

RECOMMENDATION

At this time it appears that the David Chemical Company site located in the City of Chicago, Illinois does not pose a threat to human health and the environment. The U.S. EPA Region 5 Emergency Removal Program has addressed the immediate threat posed by the former chemical manufacturing and storage operation and surrounding areas. By removing the contaminated material from the property, the threat to all exposure pathways has been eliminated. It is recommended that this site receive a no further action rating and be placed in the archived CERCLIS database. If, in the event, additional information becomes available, further site assessment activities may be warranted.

ATTACHMENT A

**ABBREVIATED PRELIMINARY ASSESSMENT
CHECKLIST**

ABBREVIATED PRELIMINARY ASSESSMENT CHECKLIST

This checklist can be used to help the site investigator determine if an Abbreviated Preliminary Assessment (APA) is warranted. This checklist should document the rationale for the decision on whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer: KENNETH W. CORKILL EPS III 2-5-02
 (Name/Title) (Date)
1021 NORTH GRAND AVE EAST, SPRINGFIELD, ILL. 217-524-1664
 (Address) (Phone)
KEN.CORKILL@EPA.STATE.IL.US
 (E-Mail Address)

Site Name: DAVID CHEMICAL COMPANY /AKA: DAYTON TIRE AND RUBBER

Previous Names (if any): _____

Site Location: 4650 W. 5TH AVENUE
 (Street)
CHICAGO IL 60644 -5219
 (City) (ST) (Zip)

Latitude: 41°51'30.0 Longitude: 087°46'30.0

Describe the release (or potential release) and its probable nature: RELEASE OF SOLID AND LIQUID CHROMIUM, LEAD, ACID, CAUSTIC + FLAMMABLE COMPOUNDS WITHIN SITE BUILDING WAS BOTH ACTUAL AND POTENTIAL. POTENTIAL AND ACTUAL RELEASE OUTSIDE SITE BUILDING ALSO OF CONCERN. THESE OCCURRED BETWEEN APRIL AND AUGUST 1993. USEPA REMOVAL ACTION TOOK PLACE BETWEEN OCTOBER 1994 AND OCTOBER 1995.

Part 1 - Superfund Eligibility Evaluation

If all answers are "no" go on to Part 2, otherwise proceed to Part 3.

	YES	NO
1. Is the site currently in CERCLIS or an "alias" of another site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are the hazardous substances potentially released at the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is there sufficient documentation to demonstrate that no potential for a release that could cause adverse environmental or human health impacts exists (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance releases have occurred, or an EPA approved risk assessment completed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please explain all "yes" answer(s). 1) SITE IS CURRENTLY IN CERCLIS.

5) REMOVAL ACTION DOCUMENTED BY POLLUTION REPORTS + FINAL SUMMARY DOCUMENTS.

CONTAINERS ETC REMOVED FROM SITE, ALSO REMOVED FROM SITE WAS CONTAMINATED SOIL

AND CONTAMINATED BUILDING MATERIAL AS THE STRUCTURE WAS RAZED.

For Part 2, if information is not available to make a “yes” or “no” response, further investigation may be needed. In these cases, determine whether an APA is appropriate. Exhibit 1 parallels the questions in Part 2. Use Exhibit 1 to make decisions in Part 3.

If the answer is "no" to any of questions 1, 2, or 3, proceed directly to Part 3.		YES	NO
1.	Does the site have a release or a potential to release?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.	Does the site have uncontained sources containing CERCLA eligible substances?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Does the site have documented on-site, adjacent, or nearby targets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If the answer is "no" to any of questions 1, 2, or 3, proceed directly to Part 3.		YES	NO
1.	Does the site have a release or a potential to release?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.	Does the site have uncontained sources containing CERCLA eligible substances?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Does the site have documented on-site, adjacent, or nearby targets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If the answers to questions 1, 2, and 3 above were all "yes" then answer the questions below before proceeding to Part 3.		YES	NO
4.	Does documentation indicate that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?	<input type="checkbox"/>	<input type="checkbox"/>
5.	Is there an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site?	<input type="checkbox"/>	<input type="checkbox"/>
6.	Is there an apparent release and no documented on-site targets or targets immediately adjacent to the site, but there are nearby targets (e.g., targets within 1 mile)?	<input type="checkbox"/>	<input type="checkbox"/>
7.	Is there no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site?	<input type="checkbox"/>	<input type="checkbox"/>

If the answers to questions 1, 2, and 3 above were all "yes" then answer the questions below before proceeding to Part 3.		YES	NO
4.	Does documentation indicate that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?	<input type="checkbox"/>	<input type="checkbox"/>
5.	Is there an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site?	<input type="checkbox"/>	<input type="checkbox"/>
6.	Is there an apparent release and no documented on-site targets or targets immediately adjacent to the site, but there are nearby targets (e.g., targets within 1 mile)?	<input type="checkbox"/>	<input type="checkbox"/>
7.	Is there no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site?	<input type="checkbox"/>	<input type="checkbox"/>

Notes:

EXHIBIT 1
SITE ASSESSMENT DECISION GUIDELINES FOR A SITE

Exhibit 1 identifies different types of site information and provides some possible recommendations for further site assessment activities based on that information. You will use Exhibit 1 in determining the need for further action at the site, based on the answers to the questions in Part 2. Please use your professional judgement when evaluating a site. Your judgement may be different from the general recommendations for a site given below.

Suspected/Documented Site Conditions		APA	Full PA	PA/SI	SI	
1.	There are no releases or potential to release.	Yes	No	No	No	
2.	No uncontained sources with CERCLA-eligible substances are present on site.	Yes	No	No	No	
3.	There are no on-site, adjacent, or nearby targets.	Yes	No	No	No	
4.	There is documentation indicating that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site.	Option 1: APA ⇔ SI	Yes	No	No	Yes
		Option 2: PA/SI	No	No	Yes	NA
5.	There is an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site.	Option 1: APA ⇔ SI	Yes	No	No	Yes
		Option 2: PA/SI	No	No	Yes	NA
6.	There is an apparent release and no documented on-site targets and no documented targets immediately adjacent to the site, but there are nearby targets. Nearby targets are those targets that are located within 1 mile of the site and have a relatively high likelihood of exposure to a hazardous substance migration from the site.	No	Yes	No	No	
7.	There is no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site.	No	Yes	No	No	

Part 3 - EPA Site Assessment Decision

When completing Part 3, use Part 2 and Exhibit 1 to select the appropriate decision. For example, if the answer to question 1 in Part 2 was "no," then an APA may be performed and the "NFRAP" box below should be checked. Additionally, if the answer to question 4 in Part 2 is "yes," then you have two options (as indicated in Exhibit 1): Option 1 – conduct an APA and check the "Lower Priority SI" or "Higher Priority SI" box below; or Option 2 – proceed with a combined PA/SI assessment.

Check the box that applies based on the conclusions of the APA:	
<input checked="" type="checkbox"/> NFRAP	<input type="checkbox"/> Refer to Removal Program - further site assessment needed
<input type="checkbox"/> Higher Priority SI	<input type="checkbox"/> Refer to Removal Program - NFRAP
<input type="checkbox"/> Lower Priority SI	<input type="checkbox"/> Site is being addressed as part of another CERCLIS site
<input type="checkbox"/> Defer to RCRA Subtitle C	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Defer to NRC	
Regional EPA Reviewer: _____ <div style="display: flex; justify-content: space-between; margin-top: 5px;"> Print Name/Signature Date </div>	

PLEASE EXPLAIN THE RATIONALE FOR YOUR DECISION: USEPA REMOVAL ACTION HAS REMOVED
THREAT OF RELEASE OF HAZAROUS SUBSTANCES TO THE ENVIRONMENT. ALL HAZARDOUS
SUBSTANCES, CONTAINERS, SOIL CONTAMINATION & CONTAMINATED BUILDING MATERIALS
WERE REMOVED FROM THE SITE & PROPERLY DISPOSED.

NOTES: